

Eastern Michigan University & ESRI

Michigan's K-12 GIS License Program



Presented by:

Mike Dueweke – EMU/ESRI K-12 GIS License Administrator

mdueweke@emich.edu

<http://esrik-12gis.emich.edu/k12/>



PRESENTATION OUTLINE

- What is the EMU/ESRI K-12 License Program ?
- Why use GIS in K-12 education?
- Who benefits from the program ?
- What are the benefits of the program ?
- How do I apply for benefits ?
- Website Overview
- I'm not an Educator; Can I get involved ?
- Join the Geospatial Revolution!

WHAT IS THE EMU/ESRI K-12 LICENSE PROGRAM ?

- Collaboration between EMU's College of Education, Michigan Virtual University and ESRI.
- Administrative , development and technical support services provided by the Institute for Geospatial Research & Education and the Department of Geography & Geology through the College of Arts & Sciences.
- Provides access to free software, free training and free limited technical support to all K-12 schools.
- Use for teaching, learning, research, and administrative uses throughout the entire state of Michigan.

WHY USE GIS IN K-12 EDUCATION ?

SOCIAL STUDIES CONTENT EXPECTATION – GRADES 6 - 12

GEOGRAPHY

GI THE WORLD IN SPATIAL TERMS: GEOGRAPHICAL HABITS OF MIND

Describe the relationships between people, places, and environments by using information that is in a geographic (spatial) context. Engage in mapping and analyzing the information to explain the patterns and relationships they reveal both between and among people, their cultures, and the natural environment. Identify and access information, evaluate it using criteria based on concepts and themes, and use geography in problem solving and decision making. Explain and use key conceptual devices (places and regions, spatial patterns and processes) that geographers use to organize information and inform their study of the world.

GI.1 Spatial Thinking

Use maps and other geographic tools to acquire and process information from a spatial perspective.

Geographers use published maps, sketch (mental) maps, and other geographic representations, tools, and technologies to acquire, organize, process, and report information from a spatial perspective. World maps made for specific purposes (population distribution, climate patterns, vegetation patterns) are used to explain the importance of maps in presenting information that can be compared, contrasted, and examined to answer the questions “Where is something located?” and “Why is it located there?” Students will begin with global scale and then refocus the scale to study the region of the Western Hemisphere, and, finally, focus on a specific place.

- 6 – GI.1.1 Describe how geographers use mapping to represent places and natural and human phenomena in the world.
- 6 – GI.1.2 Draw a sketch map from memory of the Western Hemisphere showing the major regions (Canada, United States, Mexico, Central America, South America, and Caribbean).

GI.2 Geographical Inquiry and Analysis

Use geographic inquiry and analysis to answer important questions about relationships between people, cultures, their environment, and relations within the larger world context.

Geographers use information and skills to reach conclusions about significant questions regarding the relationships between people, their cultures, the environments in which they live, and the relationships within the larger world context. Students will reach their own conclusions using this information and make a reasoned judgment about the most justifiable conclusion based on the authenticity of the information, their skill at critically analyzing the information, and presenting the results of the inquiry.

WHO BENEFITS FROM THE K-12 PROGRAM ?

SCHOOLS & TEACHERS - School Campus License for instructional use that includes all instructional computers on the school campus as well as teachers' personal computers.

ADMINISTRATORS & DISTRICTS - Administrative Use License for use in the operation/management of an educational institution. It allows administrative offices to perform functions such as demographic planning, school transportation, and facilities management.

STUDENTS & PARENTS - Student License for use by qualified students and educators at home or on a personal computer. This license is held by an individual person rather than the educational institution.

SCOPE - Available to all public, private and parochial school systems including home schooled and after school educational programs (i.e. 4-H, Boy & Girl Scouts, Not-for- Profits or Corporations working with students).

WHAT ARE THE BENEFITS OF THE PROGRAM ?

FREE SOFTWARE

- **ArcGIS 10.1** for Desktop (Basic, Standard & Advanced)
- **ArcGIS Server** (Advanced Enterprise, Advanced Workgroup, ArcGIS Image Server, ArcGIS Tracking Server, ArcIMS)
- **Arc Logistics Desktop** (routing & scheduling)
- **ESRI City Engine** (3D modeling)
- **ArcGIS Online** (GIS in the Cloud)

FREE EXTENSIONS

3D Analyst, ArcGIS Data Reviewer, ArcGIS for Maritime, ArcScan, COGO, Data Interoperability, ESRI Aeronautical Solution, ESRI Defense Mapping, ESRI Production Mapping, Geostatistical Analyst, Mapplex, Network Analyst, publisher, Schematics, Apatial Analyst, Tracking Analyst, Workflow Manager

WHAT ARE THE BENEFITS OF THE PROGRAM ?



Understanding our world.

[Store](#) | [Contact Us](#) | [Careers](#)

FREE WEB TRAINING

Search



[Home](#)

[Industries](#)

[Products](#)

[Training](#)

[Support](#)

[Services](#)

[Events](#)

[News](#)

[About](#)

◀ [Training](#)

Annual User License

[Help](#) | [Login](#)

[Overview](#)

[How It Works](#)

[How To Buy](#)

[Premium License Courses](#)

[Education Organizations](#)

Questions?



[Send an e-mail](#) or call us at
888-377-4575.

Courses Included in a Premium License

[3D Analysis of Surfaces and Features Using ArcGIS 10](#)

[3D Visualization Techniques Using ArcGIS 10](#)

[Address Geocoding with ArcGIS 10.1](#)

[Advanced Format Translations with ArcGIS Data Interoperability Spatial ETL Tools](#)

[Advanced Techniques for Cartographic Representations \(for ArcGIS 10\)](#)

[Appender ArcGIS Desktop \(para ArcGIS 10\)](#)

[Archiving Data in a Multiuser Geodatabase \(for ArcGIS 10.1\)](#)

[Basics of Map Projections \(for ArcGIS 10\)](#)

[Basics of Python \(for ArcGIS 10\)](#)

[Basics of Raster Data \(for ArcGIS 10\)](#)

[Basics of the Geodatabase Data Model](#)

[Building Models for GIS Analysis Using ArcGIS 10](#)

[Cartographic Design Using ArcGIS 9](#)

HOW DO I APPLY FOR BENEFITS ?

GETTING STARTED

<http://esrik-12gis.emich.edu/k12/>



Michigan ESRI K-12 GIS License Website

- Home
- Getting Started
- Learning Tracks
- Case Studies
- Map
- Contact Us
- About Us

[Home](#) > [Getting Started](#)

Request Software



Eastern Michigan University (EMU) is proud to partner with ESRI, the world's GIS software leader. Though this cooperative effort, EMU is able to provide members of the Michigan K-12 GIS community (teachers, students, youth group organizers, administrators, schools and school districts) free GIS software to those who agree to the **permitted uses** listed in the Licensing Agreement.

This state-of-the-art software will enable administrators, educators and students alike to access, visualize and analyze a wealth of information from and about their own communities and the world.

We highly recommend communicating with a school administrator, other teachers and/or a school information technology coordinator prior to submitting a software request in order to avoid duplicate requests and to facilitate the most effective school use of the software as possible. We also highly

Main Menu

- ▼ Home
 - [Welcome!](#)
 - [Learning Pathways](#)
 - [User account](#)
- ▼ Getting Started
 - ▼ Request Software
 - [License Agreement](#)
 - [Registration](#)
 - [Technical Support Request](#)

What's New

- [Free ESRI Virtual Campus Course "Teaching with GIS"](#) (You need a Free ESRI Global Account to take the course)
- [ArcGIS Online - User Guidelines](#)
- [ArcGIS Online -Introductory Videos](#)
- [ArcGIS Online -Diving Deeper](#)
- [Teacher PD - Jan. 2013](#)
- [EMU K-12 Press Release](#)

WEBSITE OVERVIEW

<http://esrik-12gis.emich.edu/k12/>



Michigan ESRI K-12 GIS License Website

- [Home](#)
- [Getting Started](#)
- [Learning Tracks](#)
- [Case Studies](#)
- [Map](#)
- [Contact Us](#)
- [About Us](#)

Main Menu

- ▼ Home
 - [Welcome!](#)
 - [Learning Pathways](#)
 - [User account](#)
- ▷ [Getting Started](#)
- ▷ [Learning Tracks](#)
- ▷ [Case Studies](#)
- [Map](#)
- [Contact Us](#)
- ▷ [About Us](#)

Press Release



YPSILANTI, MICH. - An exciting collaboration, that benefits ALL K-12 students, teachers and school administrators in the State of Michigan, provides a complete suite of geographic information systems (GIS) FREE to K-12 schools.

This partnership, between [Environmental Systems Research Institute \(ESRI\)](#) and Eastern Michigan University, changes the way teachers can design learning opportunities and teach their K-12 students. Due to the availability of ArcGIS, a state-of-the-art GIS software suite, all public, charter, parochial and private schools can join the [Geospatial Revolution](#) today. Educators and students should visit the EMU Michigan ESRI K-12 GIS license website to [register and download the software](#)>.

[Read more](#)

What's New

- [Free ESRI Virtual Campus Course "Teaching with GIS"](#)
(You need a Free ESRI Global Account to take the course)
- [ArcGIS Online - User Guidelines](#)
- [ArcGIS Online -Introductory Videos](#)
- [ArcGIS Online -Diving Deeper](#)
- [Teacher PD - Jan. 2013](#)
- [EMU K-12 Press Release](#)
- [Hurricane Sandy - The](#)

HOW CAN I BECOME INVOLVED ?

Become a GeoMentor

- GIS professionals understand the power of GIS.
- Your work affects your community and the world.
- Volunteer and share your knowledge with schools, teachers, informal youth groups and young people in your community.
- Help educators and students develop skills in geographic thinking.
- Help get support problems solved, and provide youth with powerful new knowledge that fosters long-term skills.
- Share experience with those around you and help them learn about the power of GIS.

**SO, DO YOU MEAN YOU WANT ME TO TEACH
ArcGIS DESKTOP ?**

ARE YOU CRAZY !

NO! LETS USE ArcGIS ONLINE INSTEAD IT'S GIS IN THE CLOUD!

- Content-based GIS Management System - Software delivered as a service; nothing to install or setup; easy and intuitive workspace ; publish maps as feature or tiled map services.
- Ready to Use Content – Basemaps, demographic maps, image services and data.
- Easily Add Data - Add your data, create mashups, add pop-ups.
- Make Maps directly in Excel – ESRI maps for Office add-in.
- Security and Data Ownership – control access with multiple layers of security.

THE BEST TOOL FOR K-12 TEACHERS

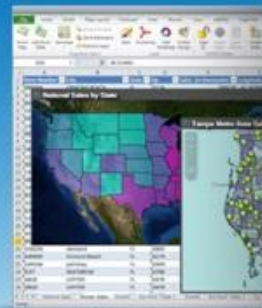
ArcGIS ONLINE

[HTTP://WWW.ARCGIS.COM/ABOUT/](http://www.arcgis.com/about/)

The Mapping Platform for Your Organization

Create interactive maps and apps and share them with the rest of your organization. Realize new opportunities and gain insight into your data. Do this quickly and easily with nothing to install or setup.

30-DAY FREE TRIAL



Reach Your Users

Share your maps and data through blogs, social media, or custom apps. [Learn more](#)



Go Mobile

Your maps and information can be accessed from anywhere. [Learn more](#)



Ready-to-use Content

Choose from a variety of beautiful basemaps to kick-start your projects. [Learn more](#)

Maps for Personal Use

Discover useful maps, data, and other information. [Home](#) | [Map](#) | [Gallery](#) | [Help](#)



Teaching with GIS: Introduction to Using GIS in the Classroom

<http://training.esri.com/gateway/index.cfm?courseid=2198&fa=catalog.webCourseDetail>

Training


Catalog

My Training

Certification

News

Common Questions

 | [Help](#) | [Login](#)

Teaching with GIS: Introduction to Using GIS in the Classroom




Format: [Web Course](#)
Duration: 1 module (3 hours)
Price: Free
Authored by Esri

Overview

Software Requirements

Course Outline

Prerequisites

 [Print](#) |  [E-mail](#) |  [Bookmark](#)

Description

Today's students embrace technology outside the classroom, and, when used effectively, technology is an excellent tool to engage students inside the classroom as well. This course presents strategies for integrating GIS to support instruction, discussion, and extended learning on any topic. You will learn how to create and use GIS maps as a framework for understanding the geographic context of current and historical events and phenomena and exploring issues of interest to your local community. Many practical ideas for GIS activities that enhance student learning and critical thinking skills are shared.


Who Should Attend

- Elementary through high school teachers, curriculum coordinators, and educational technologists.
- Youth leaders and GIS professionals who work with or mentor educators and students.

Learn How To

- Find, explore, and create GIS maps using a free, web-based viewer application.
- Help students visualize local, regional, and global data and make connections to their own environment.

New Catalog Search



This is a Free Course

[Go to Course](#)

Questions?




[Contact us via e-mail](#) or call toll-free at 888-377-4575, select option 3, between 8:00 AM and 5:00 PM (Pacific Time).

INTRODUCTION TO THE GEOSPATIAL REVOLUTION


[HTTP://GEOSPATIALREVOLUTION.PSU.EDU/EPISODE1](http://geospatialrevolution.psu.edu/episode1)

GEOSPATIAL REVOLUTION

PENNSTATE
PUBLIC BROADCASTING

Follow Us   








Geospatial Revolution / Episode One



Episode 1: Full Episode (13:45 minutes)


- Chapter 1: Welcome
- Chapter 2: How We Get There
- Chapter 3: How We Got Here
- Chapter 4: Why We Need It


Watch, Share & Embed

    SHARE   

YouTube vimeo

Episode 1 Episode 2 Episode 3 Episode 4 Trailer

BUY EPISODE 1 



Educator's Edition Now Available

Video Episodes & Learning Materials for Grades 7-12 and Postsecondary →